BUSINESS ANALYTICS

III Semester: MBA								
Course Code	**Category**	**Hours / Week**			**Credits**	**Maximum Marks**		
		L	**T**	**P**	**C**	**CIA**	**SEE**	**Total**
CMBC31	**Core**	3	1	-	4	30	70	100
Contact Classes: 45	**Tutorial Classes: 15**	**Practical Classes: Nil**				**Total Classes: 60**		

I. COURSE OVERVIEW:

The course intends to provide knowledge of basic concept of business analytics like data, data science and its challenges. This course is going to give at length exposure on different types of analytics like data warehousing and data marts, meta data and data transformation and also gives knowledge on data mining and text mining and text analytics and web mining and data simulation and automated decision systems gives exposure on the concepts of hadoop, python, machine learning and artificial intelligence for the purpose of analysis and decision making in business.

II. COURSE OBJECTIVES:

The students will try to learn:

I. The datahandling techniques and analytical tools that can be used for decision making.
II. Data warehousing concepts, data mining techniques.
III. Data mining and text mining and web mining techniques.
IV. Prescriptive Analytics and its usage to help business to decide a course of action
V. Big data technologies for drawing analytics in various functional areas of business.

COURSE OUTCOMES:

After successful completion of the course, students will be able to:

CO 1: Contrast on basic concepts of business analytics for making business analysis.
CO 2: List the challenges of business analytics and framework of business analytics for effective business decisions.
CO 3: Identify various data related concepts and data warehousing for effective maintenance of data.
CO 4: Appraise on reporting and performance measurement through analytics for controlling the organizational performance.
CO 5: Develop suitable system for data mining process for easy access of data.
CO 6: Examine the text mining and web mining processes for cloud data storage and accessing.
CO 7: Experiment with prescriptive analytics and its models for the purpose of effective decision making.
CO 8: List various types of automated decision systems and expert systems for decision support in organization.
CO 9: Organize the big data technologies available in environment for adaption and maintenance.
CO 10: Distinguish between Finance, HR and Marketing analytics for applying them in their respective fields.

IV. SYLLABUS

UNIT-I	INTRODUCTION TO BUSINESS ANALYTICS	Classes: 08

Introduction to Analytics, Data Science, Big Data, Applications of Analytics in different Domains, Business Analytics - Challenges from Outside and Within, BASP (Business Analytics Success Pillars) framework, Analyst's Role in the BA Model - Three Requirements the Analyst Must Meet.

UNIT-II	DESCRITPTIVE ANALYSTICS	Classes: 10

Data Warehousing - Introduction, Characteristics, Data Marts, Meta Data, Data Warehouse Architecture, Data Extraction, Transformation and Load Processes in a Data Warehouse Business Reporting and Business Performance Measurement and Visual Analytics.

UNIT-III	PREDICTIVE ANALYTICS	Classes: 09
Data Mining - Introduction, Characteristics, and Data Mining Process. Text Mining - Introduction, Text Analytics, Applications and Sentiment Analytics and Applications. Web Mining - Introduction, Web Analytics.		
UNIT-IV	**PRESPECTIVE ANALYTICS**	**Classes: 10**
Prescriptive Analytics - Introduction, Prescriptive Models - Simulation, Heuristic, Automated Decision Systems and Expert Systems, Knowledge Management.		
UNIT-V	**FUTURE OF BIG DATA**	**Classes: 08**
Big Data: Definition. Big Data Technologies - Hadoop, R, Python, Machine Learning and Artificial Intelligence. Data Scientist, Applications of Analytics in different Domains. Fundamentals of Marketing Analytics, Finance Analytics, HR - Analytics and Supply Chain Analytics.		

Text Books:

1. U.DineshKumar, "BusinessAnalytics", Wiley, 2017.
2. Laursen, Thorlund, "Business Analytics for Managers",Wiley, 2nd Edition, 2017.
3. Sahil Raj, "Business Analytics", Cengage Learning, 3rd Edition, 2015
4. Albright, Winston, "Business Analytics - Data Analysis and Decision Making", Cengage Learning, 5th Edition, 2015.
5. Jac Fitz, Mattox II, "Predictive Analytics for Human Resources", Wiley, 3rd Edition, 2015
6. Ramesh Sharada, Dursun Delen, EfraimTurban, "Business Intelligence and Analytics", Pearson, 10th Edition, 2014.
7. Jean Paul Isson, Jesse S.Harriot, "Win with Advanced Business Analytics", Wiley, 1st Edition, 2012.
8. Gert H.N. Laursen, Jesper Thorlund, "Business Analytics for Managers", John Wiley and Sons, Inc. 2010.

Reference Books:

1. Artun, Levin, "Predictive Marketing", Wiley, 2nd Edition, 2015.
2. RNPrasad,SeemaAcharya, "FundamentalsofBusinessAnalytics", Wiley,2011.

Web References:

1. https://www.pdfdrive.com/business-analytics-for-managers-taking-business-intelligence-beyond-reporting-e167628994.html

E-Text Books:

1. https://www.pdfdrive.com/business-intelligence-and-analytics-e56416503.html